



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1400  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,753	04/10/2001	Michael Topolovac	OPEN-001	3355

21921 7590 04/11/2006

DOV ROSENFELD  
5507 COLLEGE AVE  
SUITE 2  
OAKLAND, CA 94618

EXAMINER
----------

TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
----------	--------------

2162

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/832,753

Applicant(s)

TOPOLOVAC ET AL.

Examiner

Cam Y T. Truong

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4,6-10,12,13 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4,6-10,12,13 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant has amended claims 4, 9, 10, 13, 15, 21, 22 and canceled claims 5, 11, 14 in the amendment filed on 1/11/2005.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 4, 6-10, 12-13, 15-23 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argued that Rivette does not teach the amended claims 4, 10, 15.

In response: As to claim 4, Rivette teaches the claimed limitations:

“storing the plurality of BOMs in a processing system” as storing BOMs in database in a processing system (fig. 47, col. 22, lines 30-35),

“each BOM describable as a tree with each node an element” as each BOM is a hierarchical and recursive data structure that identifies the subassemblies of a product with many nodes where the first node is an element Frame, second node is an element Screw. Each hierarchical BOM is represented as a tree (fig. 22, col. 70, lines 42-55),

“each element in each BOM having an owner of a set more than one owner” each record or patent in each BOM associated with an Corp\_entity\_ID of a set Corp\_entity IDs. A Corp\_entity\_ID is represented as an owner (col. 77, lines 25-35; col. 74, lines 35-55),

“each BOM having an owner of the set of owners, such that BOMS associated with different owners are stored in the same processing system” as

Art Unit: 2162

BOMS are associated with different Corp\_entity\_Ids such as Corp1, Corp2 of the set of Corp\_entity\_Ids (fig. 36, col. 77, lines 25-35; col. 74, lines 35-55).

Rivette does not explicitly teach the claimed limitations "an owner associated with a particular BOM being an entity that controls access to all the information in the particular BOM, wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM".

Fu teaches the claimed limitations:

"an owner associated with a particular BOM being an entity that controls access to all the information in the particular BOM " as an owner have a viewer packet being an entity that control access to the BOM in the viewer packet (col. 17, lines 20-33, lines 50-55; col. 10, lines 1-5);

"wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM" as each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching of an owner have a viewer

Art Unit: 2162

packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

As to claim 10, Rivette teaches the claimed limitations:

“storing a database in a processing system, the database including: a list of elements, each element having a unique identifier, one or more elements of the list of elements being for inclusion in one or more of the plurality of BOMs” as each record in the BOM table 1217 includes a BOM\_id attribute which stores a key that is unique to the associated BOM node. The BOM table 1217 is included in the BOM databases 626 (col. 71, lines 52-67; col. 72, lines 1-5);

“one or more data structures for storing the plurality of BOMs” as storing BOMs in databases 626 and database 4808 (col. 74, lines 64-65; col. 75, lines 4-5);

“each BOM describable as a tree with each node an element of the list of elements” as BOM 2202 is described as a tree with each node an element of the list of elements such as Frame, Screw, Wheel, Rim and Tire. BOM 2320 is described as a tree with each node an element of the list of elements such as Lawn Mower, Frame, Screw, Engine (figs. 22-23A, col. 71, lines 1-30);

Art Unit: 2162

“at least two of the BOMs being associated with respective owners of a set of owners” a BOM group that is titled Video conversions of vide is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 88, lines 1-30);

“providing remote access to one or more elements of information in the database to one or more users such that the database is arranged to contain two BOMS associated with two different owners” as a user can search patents or BOM groups which are stored in a server 314 via Internet system. Where a BOM group that is titled Video conversions of video is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 34, lines 45-67; col. 55, lines 1-35; col. 88, lines 1-30).

Rivette does not explicitly teach the claimed limitations “wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM”.

Fu teaches the claimed limitation “wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential

Art Unit: 2162

information is limited to the owner of the BOM and any designates of the owner of the BOM" as each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching of an owner have a viewer packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

As to claim 15, Rivette teaches the claimed limitations:

"storing a database in a processing system, the database including: a list of elements, each element having a unique identifier, one or more of the elements being for inclusion in at least one of the BOMs" as storing BOM databases 626 that includes a BOM table 1217. This table has records. Each record of BOM table 1217 includes a BOM\_id attribute, which stores a unique key to the associated BOM node (col. 71, lines 52-65; col. 72, lines 1-5);

"one or more BOM data structures for storing the plurality of BOMs" as the BOM table 1217 stores one record for the screw part. The BOM\_BOM\_xref table 1219 includes a record for each parent/child relationship in the BOMs

Art Unit: 2162

represented in the BOM table 1217. Tables 1219 and 1217 are represented as BOM data structures (col. 71, lines 65-67; col. 72, lines 25-30),

“each BOM describable as a tree with each node an element of the list of elements and each branch of the tree defining a parent-child relationship the one or more BOM data structures storing information on the parent-child relationships of the plurality of BOMs, two or more of the BOMs associated with a respective owner of the set of the owners” as (col. 71, lines 65-67; col. 72, lines 25-30),

“providing remote access to one or more elements of information in the database to one or more users, such that the database is arranged to contain BOMS having different owners” as a user can search patents or BOM groups which are stored in a server 314 via Internet system. Where a BOM group that is titled Video conversions is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 34, lines 45-67; col. 55, lines 1-35; col. 88, lines 1-30).

Rivette does not explicitly teach the claimed limitations “wherein the database includes confidential information of at least two of the owners such that unrestricted to the confidential information is limited to the respective owner of the confidential information and any designates of the owner”.

Fu teaches an owner have a viewer packet being an entity that control access to the BOM in the viewer packet (col. 17, lines 20-33, lines 50-55; col. 10, lines 1-5). Each owner has a viewer packet that includes privileges access data



Art Unit: 2162

for any users to limit user's access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching of an owner have a viewer packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

For the above reason, Examiner believed the combination of Rivette and Fu teaches the claimed invention.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6-10, 12-13, 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rivette (US 6339767) in view of Fu et al (or hereinafter "Fu") (US 7010580).

As to claim 4, Rivette teaches the claimed limitations:

Art Unit: 2162

“storing the plurality of BOMs in a processing system” as storing BOMs in database in a processing system (fig. 47, col. 22, lines 30-35),

“each BOM describable as a tree with each node an element” as each BOM is a hierarchical and recursive data structure that identifies the subassemblies of a product with many nodes where the first node is an element Frame, second node is an element Screw. Each hierarchical BOM is represented as a tree (fig. 22, col. 70, lines 42-55),

“each element in each BOM having an owner of a set more than one owner” each record or patent in each BOM associated with a Corp\_entity\_ID of a set Corp\_entity IDs. An Corp\_entity\_ID is represented as an owner (col. 77, lines 25-35; col. 74, lines 35-55),

“each BOM having an owner of the set of owners, such that BOMS associated with different owners are stored in the same processing system” as BOMS are associated with different Corp\_entity\_Ids such as Corp1, Corp2 of the set of Corp\_entity\_Ids (fig. 36, col. 77, lines 25-35; col. 74, lines 35-55).

Rivette does not explicitly teach the claimed limitations “an owner associated with a particular BOM being an entity that controls access to all the information in the particular BOM, wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM”.

Fu teaches the claimed limitations:

Art Unit: 2162

“an owner associated with a particular BOM being an entity that controls access to all the information in the particular BOM “ as an owner have a viewer packet being an entity that control access to the BOM in the viewer packet (col. 17, lines 20-33, lines 50-55; col. 10, lines1-5);

“wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM” as each owner have a viewer packet that includes privileges access data for any users to limit user’s access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu’s teaching of an owner have a viewer packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user’s access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

As to claim 6, Rivette teaches the claimed limitation “wherein the BOMs are stored remotely, and wherein access to the BOMs is provided remotely” as (figs. 9).

As to claim 7, Rivette teaches the claimed limitation “wherein the storing of the BOMs includes: storing one or more data structures in the processing system for storing the plurality of BOMs, the method further comprising: storing a list of elements in the processing system, each element in the list of elements having a unique element identifier, each element in each BOM being one of the elements in the list of elements, such that the list of elements and the one or more data structures are part of a database stored in the same processing system” as (figs. 142-145, col. 76, lines 45-65).

As to claim 8, Rivette teaches the claimed limitation “providing unrestricted access to any confidential information in a particular stored BOM only to the owner associated with the particular BOM and to none or more designates of the owner” as (col. 39, lines 40-65).

As to claims 9 and 12, Rivette teaches the claimed limitation “restricting access to information about a particular element in the element list that is associated with a particular owner to the particular owner and none or more designates of the particular owner” as (col. 39, lines 40-65).

As to claim 10, Rivette teaches the claimed limitations:

“storing a database in a processing system, the database including: a list of elements, each element having a unique identifier, one or more elements of

Art Unit: 2162

the list of elements being for inclusion in one or more of the plurality of BOMs” as each record in the BOM table 1217 includes a BOM\_id attribute which stores a key that is unique to the associated BOM node. The BOM table 1217 is included in the BOM databases 626 (col. 71, lines 52-67; col. 72, lines 1-5);

“one or more data structures for storing the plurality of BOMs” as storing BOMs in databases 626 and database 4808 (col. 74, lines 64-65; col. 75, lines 4-5);

“each BOM describable as a tree with each node an element of the list of elements” as BOM 2202 is described as a tree with each node an element of the list of elements such as Frame, Screw, Wheel, Rim and Tire. BOM 2320 is described as a tree with each node an element of the list of elements such as Lawn Mower, Frame, Screw, Engine (figs. 22-23A, col. 71, lines 1-30);

“at least two of the BOMs being associated with respective owners of a set of owners” a BOM group that is titled Video conversions of vide is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 88, lines 1-30);

“providing remote access to one or more elements of information in the database to one or more users such that the database is arranged to contain two BOMS associated with two different owners” as a user can search patents or BOM groups which are stored in a server 314 via Internet system. Where a BOM group that is titled Video conversions of video is associated with respective

Art Unit: 2162

owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 34, lines 45-67; col. 55, lines 1-35; col. 88, lines 1-30).

Rivette does not explicitly teach the claimed limitations "wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM".

Fu teaches the claimed limitation "wherein for each of at least two different owners, at least one of the BOMs of the respective owner includes confidential information of the owner, such that unrestricted access to the confidential information is limited to the owner of the BOM and any designates of the owner of the BOM" as each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching of an owner have a viewer packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain

Art Unit: 2162

information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

As to claims 13 and 20, Rivette teaches the claimed limitation “wherein a first BOM of a first owner may share one or more elements of the list of elements with a second BOM of a second owner” as the BOM group of source patent 4701102 may share one issue date 110587 of the list of element with another BOM group of source 5003933 (fig. 63).

As to claim 15, Rivette teaches the claimed limitations:

“storing a database in a processing system, the database including: a list of elements, each element having a unique identifier, one or more of the elements being for inclusion in at least one of the BOMs” as storing BOM databases 626 that includes a BOM table 1217. This table has records. Each record of BOM table 1217 includes a BOM\_id attribute, which stores a unique key to the associated BOM node (col. 71, lines 52-65; col. 72, lines 1-5);

“one or more BOM data structures for storing the plurality of BOMs” as the BOM table 1217 stores one record for the screw part. The BOM\_BOM\_xref table 1219 includes a record for each parent/child relationship in the BOMs represented in the BOM table 1217. Tables 1219 and 1217 are represented as BOM data structures (col. 71, lines 65-67; col. 72, lines 25-30),

“each BOM describable as a tree with each node an element of the list of elements and each branch of the tree defining a parent-child relationship the one

Art Unit: 2162

or more BOM data structures storing information on the parent-child relationships of the plurality of BOMs, two or more of the BOMs associated with a respective owner of the set of the owners” as (col. 71, lines 65-67; col. 72, lines 25-30),

“providing remote access to one or more elements of information in the database to one or more users, such that the database is arranged to contain BOMS having different owners” as a user can search patents or BOM groups which are stored in a server 314 via Internet system. Where a BOM group that is titled Video conversions is associated with respective owners Sanyo Electric Co and The United States. Another BOM group that is titled Digital video recorder is associated with respective Sonora of a set same owners as such Sonora. Each group of BOM can be represented as a BOM (col. 34, lines 45-67; col. 55, lines 1-35; col. 88, lines 1-30).

Rivette does not explicitly teach the claimed limitations “wherein the database includes confidential information of at least two of the owners such that unrestricted to the confidential information is limited to the respective owner of the confidential information and any designates of the owner”.

Fu teaches an owner have a viewer packet being an entity that control access to the BOM in the viewer packet (col. 17, lines 20-33, lines 50-55; col. 10, lines 1-5). Each owner has a viewer packet that includes privileges access data for any users to limit user’s access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu’s teaching of an owner have a viewer



Art Unit: 2162

packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

As to claim 16, Rivette teaches the claimed limitation "wherein a BOM of a particular owner includes confidential information, and wherein the confidential information owner includes the BOM confidential information" as (col. 71, lines 50-65; col. 39, lines 40-65).

As to claim 17, Rivette teaches the claimed limitation "wherein providing remote access includes providing remote access via public network" as (fig. 4).

As to claim 18, Rivette teaches the claimed limitation "wherein the public network is the Internet" as (fig. 9).

As to claim 19, Rivette teaches the claimed limitations:

"wherein one or more elements in the element list is associated with a respective owner of the set of owners, wherein the list of elements includes an indication of ownership for each element associated with one of the owners" as (figs. 61-63, col. 88, lines 1-30).

Art Unit: 2162

Rivette does not explicitly teach the claimed limitation "and wherein the confidential information of an owner that owns a element in the list of elements includes confidential information in the list of elements, such that unrestricted access to confidential information about a particular element in the element list that is associated with a particular owner is limited to the particular owner and none or more designates of the particular owner".

Fu teaches an owner have a viewer packet being an entity that control access to the BOM in the viewer packet (col. 17, lines 20-33, lines 50-55; col. 10, lines 1-5. Fu further teaches each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet (col. 17, lines 50-55; col. 10, lines 1-30; col. 4, lines 39-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Fu's teaching of an owner have a viewer packet being an entity that control access to the BOM in the viewer packet and each owner have a viewer packet that includes privileges access data for any users to limit user's access the data in the viewer packet to maintain trade secrets and confidentiality among business partners and allow access to certain information according to established privileges in a organized, controllable and useful manner (col. 3, lines 24-27).

As to claim 21, Rivette teaches the claimed limitation "wherein each element in the element list is one the set consisting of a physical element and a

Art Unit: 2162

process, wherein the physical element may itself be a BOM and wherein the process that may reference a set of steps or operations” as (col. 71, lines 20-40).

As to claim 22, Rivette teaches the claimed limitations:

“wherein each BOM data structure is for storing the parent-child relationships for at least one BOM of the plurality of BOMs” as (col. 72, lines 25-30),

“and wherein a BOM data structure includes, for a particular BOM, an entry for each element in the particular BOM, said element entry including a reference to the element’s entry in the list of elements, an entry indicating the owner, and an entry indicating any child of the element in the case the element has a child in the tree representing the particular BOM” as (col. 72, lines 1-50).

As to claim 23, Rivette teaches the claimed limitation “wherein the parent child relations for all the BOMS are stored in a single BOM data structure” as (col. 72, lines 25-30).

### ***Conclusion***

Art Unit: 2162

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2162

***Contact Information***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cam Y Truong  
Primary Examiner  
Art Unit 2162  
3/29/2006